STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:	10/53	1.870,
Source:	•	PILO
Date Processed by STIC:	9	1/2/05
		- ' <i> </i>

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO **REDUCE** ERRORED SEQUENCE LISTINGS, **PLEASE** USE THE <u>CHECKER</u> <u>VERSION 4.2.2 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (http://www.uspto.gov/ebc/efs/downloads/documents.htm, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- 3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05): U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building. 401 Dulany Street. Alexandria, VA 22314

Revised 01/24/05



PCT

RAW SEQUENCE LISTING DATE: 09/12/2005
PATENT APPLICATION: US/10/531,870 TIME: 13:21:40

Input Set : A:\764765_1.txt

Output Set: N:\CRF4\09122005\J531870.raw

```
3 <110> APPLICANT: FIT Biotech Oyj Plc.
     5 <120> TITLE OF INVENTION: Novel selection system
     7 <130> FILE REFERENCE: 2031002
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/531,870
C--> 9 <141> CURRENT FILING DATE: 2005-04-19
                                                                   Does Not Comply
     9 <160> NUMBER OF SEQ ID NOS: 29
                                                                corrected Diskette Neede
     11 <170> SOFTWARE: PatentIn version 3.1
     13 <210> SEO ID NO: 1
     14 <211> LENGTH: 780
                                                                  pg 4-6
     15 <212> TYPE: DNA
     16 <213> ORGANISM: Escherichia coli
     18 <400> SEOUENCE: 1
     19 gtttcgtttg attggctgtg gttttataca gtcattactg cccgtaatat gccttcgcgc
     21 catgettacg cagatagtgt ttatecagea gegtttgetg catateeggt aactgeggeg
                                                                              120
     23 ctaactgacg gcagaatatc cccatataag cgacctcttc cagcacgatg gcgttatgca
                                                                              180
     25 ccgcatcttc ggcatttttg ccccatgcaa acgggccgtg ggaatggacc agaacgccgg
                                                                              240
     27 gcatttgcgc tgcatcgata ccctgttttt caaaggtttc tacgatgacg ttaccggttt
                                                                              300
     29 cccactcata ttcgccgttg atttctgcgt cggtcatttt gcgggtgcag ggaatggtgc
                                                                              360
     31 cgtagaaata gtcggcgtgg gtggtgccgg ttgctggaat cgactgaccc gcctgcgccc
                                                                              420
     33 agatggtggc gtggcgcgag tgcgtatgca caatgccgcc aatggagggg aatgcctgat
                                                                              480
     35 agagcagccg gtgagttggc gtgtcggagg agggcttttt cgtaccttca accacttcac
                                                                              540
     37 eggtttegat getaaceaeg accatategt eageggteat gaegetgtaa tegaegeegg
                                                                              600
     39 aaggtttgat cacaaagacg ccgcgctcgc gatcaacggc gctgacgttg ccccatgtga
                                                                              660
     41 gcgtgaccag gttgtgtttt ggcagcgcca ggttggcttc taatacctgg cgtttgagat
                                                                              720
     43 cttctaacat gttgactcct tcgtgccgga tgcgctttgc ttatccggcc tacaaaatcg
                                                                              780
     46 <210> SEQ ID NO: 2
     47 <211> LENGTH: 76
     48 <212> TYPE: DNA
    49 <213> ORGANISM: Artificial Sequence
     51 <220> FEATURE:
     52 <223> OTHER INFORMATION: Primer
     54 <400> SEQUENCE: 2
     55 cgccatggtt ctcatgtttg acagcttatc atcgataagc tttaatgcgg tagtttagca
                                                                               60
     57 cgaaggagtc aacatg
                                                                               76
     60 <210> SEQ ID NO: 3
    61 <211> LENGTH: 64
    62 <212> TYPE: DNA
    63 <213> ORGANISM: Artificial Sequence
     65 <220> FEATURE:
    66 <223> OTHER INFORMATION: Primer
     68 <400> SEQUENCE: 3
     69 cgccatggac tagtaaaaaa aagcccgctc attaggcggg ctgtcattac tgcccgtaat
                                                                               60
```

71 atqc

64

RAW SEQUENCE LISTING DATE: 09/12/2005 PATENT APPLICATION: US/10/531,870 TIME: 13:21:40

Input Set : A: \764765 1.txt

Output Set: N:\CRF4\09122005\J531870.raw

74 <210> SEQ ID NO: 4 75 <211> LENGTH: 81 76 <212> TYPE: DNA 77 <213> ORGANISM: Artificial Sequence 79 <220> FEATURE: 80 <223> OTHER INFORMATION: Primer 82 <400> SEQUENCE: 4 83 cgccatggac tagttctcat gtttgacagc ttatcatcga taagctttaa tgcggtagtt 60 85 tagcacgaag gagtcaacat g 88 <210> SEQ ID NO: 5 89 <211> LENGTH: 58 90 <212> TYPE: DNA 91 <213> ORGANISM: Artificial Sequence 93 <220> FEATURE: 94 <223> OTHER INFORMATION: Primer 96 <400> SEQUENCE: 5 97 cgccatggaa aaaaaagccc gctcattagg cgggctgtca ttactgcccg taatatgc 100 <210> SEQ ID NO: 6 101 <211> LENGTH: 22 102 <212> TYPE: DNA 103 <213> ORGANISM: Artificial Sequence 105 <220> FEATURE: 106 <223 > OTHER INFORMATION: Primer 108 <400> SEQUENCE: 6 22 109 gccagggttt tcccagtcac ga 112 <210> SEQ ID NO: 7 113 <211> LENGTH: 24 114 <212> TYPE: DNA 115 <213> ORGANISM: Artificial Sequence 117 <220> FEATURE: 118 <223> OTHER INFORMATION: Primer 120 <400> SEQUENCE: 7 24 121 gagcggataa caatttcaca cagg 124 <210> SEQ ID NO: 8 125 <211> LENGTH: 22 126 <212> TYPE: DNA 127 <213> ORGANISM: Artificial Sequence 129 <220> FEATURE: 130 <223> OTHER INFORMATION: Primer 132 <400> SEQUENCE: 8 133 ccaactcacc ggctgctcta tc 22 136 <210> SEQ ID NO: 9 137 <211> LENGTH: 24 138 <212> TYPE: DNA 139 <213> ORGANISM: Artificial Sequence 141 <220> FEATURE: 142 <223> OTHER INFORMATION: Primer 144 <400> SEQUENCE: 9 145 aatgccgaag atgcggtgca taac 24

RAW SEQUENCE LISTING DATE: 09/12/2005
PATENT APPLICATION: US/10/531,870 TIME: 13:21:40

Input Set : A:\764765 1.txt

Output Set: N:\CRF4\09122005\J531870.raw

148 <210> SEQ ID NO: 10 149 <211> LENGTH: 20 150 <212> TYPE: DNA 151 <213> ORGANISM: Artificial Sequence 153 <220> FEATURE: 154 <223> OTHER INFORMATION: Primer 156 <400> SEQUENCE: 10 157 taactgcggc gctaactgac 20 160 <210> SEQ ID NO: 11 161 <211> LENGTH: 20 162 <212> TYPE: DNA 163 <213> ORGANISM: Artificial Sequence 165 <220> FEATURE: 166 <223 > OTHER INFORMATION: Primer 168 <400> SEQUENCE: 11 20 169 ggttgctgga atcgactgac 172 <210> SEQ ID NO: 12 173 <211> LENGTH: 66 174 <212> TYPE: DNA 175 <213 > ORGANISM: Artificial Sequence 177 <220> FEATURE: 178 <223> OTHER INFORMATION: Primer 180 <400> SEQUENCE: 12 60 181 ctcaaacgcc caggtattag aagccaacct ggcgctgcca aaacacgtgt aggctggagc 66 183 tqcttc 186 <210> SEQ ID NO: 13 187 <211> LENGTH: 60 188 <212> TYPE: DNA 189 <213> ORGANISM: Artificial Sequence 191 <220> FEATURE: 192 <223> OTHER INFORMATION: Primer 194 <400> SEQUENCE: 13 60 195 ggtttgatca caaagacgcc gcgctcgcga tcaacggcgc attccgggga tccgtcgacc 198 <210> SEQ ID NO: 14 199 <211> LENGTH: 20 200 <212> TYPE: DNA 201 <213> ORGANISM: Artificial Sequence 203 <220> FEATURE: 204 <223> OTHER INFORMATION: Primer 206 <400> SEQUENCE: 14 20 207 cggcacgaag gagtcaacat 210 <210> SEO ID NO: 15 211 <211> LENGTH: 20 212 <212> TYPE: DNA 213 <213 > ORGANISM: Artificial Sequence 215 <220> FEATURE: 216 <223> OTHER INFORMATION: Primer 218 <400> SEQUENCE: 15

20

219 tgatagagca gccggtgagt

DATE: 09/12/2005

TIME: 13:21:40

Input Set : A:\764765 1.txt Output Set: N:\CRF4\09122005\J531870.raw 222 <210> SEO ID NO: 16 223 <211> LENGTH: 20 224 <212> TYPE: DNA 225 <213> ORGANISM: Artificial Sequence 227 <220> FEATURE: 228 <223> OTHER INFORMATION: Primer 230 <400> SEQUENCE: 16 20 231 tcagatcctt ggcggcaaga 234 <210> SEQ ID NO: 17 235 <211> LENGTH: 20 236 <212> TYPE: DNA 237 <213> ORGANISM: Artificial Sequence 239 <220> FEATURE: 240 <223> OTHER INFORMATION: Primer 242 <400> SEQUENCE: 17 243 tgtaatcgac gccggaaggt 246 <210> SEQ ID NO: 18 248 <212> TYPE: DNA
249 <213 ORGANISM Artificial huds lylaration (see \$6\$ for even lylaration)
W--> 251 <220> FEATURE:
W--> 251 <223> OTHER INFORMATION: W--> 251 < 400 > 18 60 252 ggatccgacc ggcaacggta cagatccgac cggcaacggt acagatccga ccggcaacgg 254 tcagatccga ccggcaacgg tacagatccg accggcaacg gtacagatcc gaccggcaac 120 256 ggtacagatc cgaccggcaa cggtacagat ccgaccggca acggtacaga tccgaccggc 180 258 aacggtacag atccgaccgg caacggtaca gatcccccta gcgaattgac tagttctcat 240 260 gtttgacagc ttatcatcga taagctttaa tgcggtagtt tagcacgaag gagtcaacat 300 360 262 gttagaagat ctcaaacgcc aggtattaga agccaacctg gcgctgccaa aacacaacct 420 264 ggtcacgctc acatggggca acgtcagcgc cgttgatcgc gagcgcggcg tctttgtgat 266 caaaccttcc ggcgtcgatt acagcgtcat gaccgctgac gatatggtcg tggttagcat 480 268 cgaaaccggt gaagtggttg aaggtacgaa aaagccctcc tccgacacgc caactcaccg 540 600 270 gctgctctat caggcattcc cctccattgg cggcattgtg catacgcact cgcgccacgc 660 272 caccatctgg gcgcaggcgg gtcagtcgat tccagcaacc ggcaccaccc acgccgacta 720 274 tttctacggc accattccct gcacccgcaa aatgaccgac gcagaaatca acggcgaata 780 276 tqaqtqqqaa accqqtaacq tcatcqtaqa aacctttgaa aaacagggta tcgatgcagc 840 278 qcaaatqccc qqcqttctqq tccattccca cggcccgttt gcatggggca aaaatgccga 900 280 agatqcqqtq cataacqcca tcqtqctqqa agaqgtcgct tatatgggga tattctgccg 960 282 traqttaqcq ccqcaqttac cqqatatgca gcaaacgctg ctggataaac actatctgcg 284 taaqcatqqc qcqaaqqcat attacgggca qtaatgacag cccgcctaat gagcgggctt 1020 1030 286 ttttttccat 289 <210> SEQ ID NO: 19 290 <211> LENGTH: 696 291 <212> TYPE: DNA 292 <213> ORGANISM: Escherichia coli 294 <400> SEQUENCE: 19 295 atqttaqaag atctcaaacg ccaggtatta gaagccaacc tggcgctgcc aaaacacaac 60

297 ctggtcacgc tcacatgggg caacgtcagc gccgttgatc gcgagcgcgg cgtctttgtg 299 atcaaacctt ccggcgtcga ttacagcgtc atgaccgctg acgatatggt cgtggttagc

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/531,870

120

180

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/531,870

Input Set : A:\764765 1.txt

Output Set: N:\CRF4\09122005\J531870.raw

```
240
     301 atequaaceq qtquaqtqqt tquaqqtacq aaaaagccct cctccgacac gccaactcac
     303 eggetgetet ateaggeatt eccetecatt ggeggeattg tgeataegea etegegeeae
                                                                               300
     305 gecaccatet gggegeagge gggteagteg attecageaa ceggeaceae eeaegeegae
                                                                               360
     307 tatttctacg gcaccattcc ctgcacccgc aaaatgaccg acgcagaaat caacggcgaa
                                                                               420
     309 tatgagtggg aaaccggtaa cgtcatcgta gaaacctttg aaaaacaggg tatcgatgca
                                                                               480
     311 gegeaaatge ceggegttet ggteeattee caeggeeegt ttgeatgggg caaaaatgee
                                                                               540
                                                                               600
     313 gaagatgegg tgcataacge categtgetg gaagaggteg ettatatggg gatattetge
     315 cqtcaqttaq cqccqcaqtt accqqatatg cagcaaacgc tgctggataa acactatctg
                                                                               660
                                                                               696
     317 cgtaagcatg gcgcgaaggc atattacggg cagtaa
     320 <210> SEQ ID NO: 20
     321 <211> LENGTH: 687
     322 <212> TYPE: DNA
     323 <213> ORGANISM: Escherichia coli
     325 <400> SEQUENCE: 20
     326 atgcaaaagc taaaacagca ggtatttgaa gccaacatgg agctgccgcg ctacgggctg
                                                                                60
                                                                               120
     328 gtgaccttta cctggggcaa cgtcagcgct atcgaccgcg aacgcgggct ggtggtgatc
     330 aagcccagcg gcgttgccta cgaaaccatg aaagcggccg atatggtggt ggttgatatg
                                                                               180
                                                                               240
     332 ageggeaagg tggtggaagg ggagtatege ceatetteeg acaetgegae geatetegaa
     334 ctctaccgtc gttacccgtc gcttggtggc attgtccata cccactccac tcatgccacc
                                                                               300
     336 gcatgggcgc aggcggggct ggcgatcccg gcgttaggca ccacgcacgc cgactacttc
                                                                               360
     338 tttggcgaca ttccgtgtac gcgcgggtta agcgaagaag aggtgcaggg cgagtatgaa
                                                                               420
                                                                               480
     340 ctgaacaccg gcaaagtgat tatcgaaacg ctgggcaacg ccgagccgct gcatacgccg
     342 qqaattqtqq tqtatcaqca cqqqccqttc qcctqqqqqa aaqatqctca cqatqcgqtq
                                                                               540
     344 cataacgegg tggtgatgga agaagtggeg aaaatggegt ggattgeeeg eggeattaac
                                                                               600
                                                                               660
     346 ccacaactca atcacatcga cagcttcctg atgaataaac acttcatgcg taaacacggt
                                                                               687
     348 cctaacgctt attacgggca gaagtag
     351 <210> SEQ ID NO: 21
     352 <211> LENGTH: 65
     353 <212> TYPE: DNA
     354 <245 ORGANISM (Artificial
                                       some eur
W--> 356/<220> FEATURE:
W--> 356 223 OTHER INFORMATION:
W--> 356 <400> 21
                                                                                60
     357 cagcaggtat ttgaagccaa catggagctg ccgcgctacg ggctggtgta ggctggagct
                                                                                65
     359 gcttc
     362 <210> SEQ ID NO: 22
     363 <211> LENGTH: 66
     364 <212> TYPE: DNA
     365 <22 ORGANISM: (Artificia
W--> 367 ₹220>\FEATURE:
W--> 367 (<223 → OTHER INFORMATION:
W--> 367 < 400 > 22
                                                                                60
     368 aaacggctgc ggaattagac cagttatctc ccgaggaagg aaattaattc cggggatccg
                                                                                66
     370 tcgacc
     373 <210> SEQ ID NO: 23
     374 <211> LENGTH: 21
     375 <212> TYPE: DNA
     376 <213 ORGANISM: Artificia
W--> 378/<220>) FEATURE:
```

enn occur in subsequent sequences (pb)

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 09/12/2005 PATENT APPLICATION: US/10/531,870 TIME: 13:21:41

Input Set : A:\764765 1.txt

Output Set: N:\CRF4\09122005\J531870.raw

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:18,21,22,23,24,26,27,28,29

Use of <220> Feature (NEW RULES): Un Uplanation Sequence (s) are missing to Sequence(s) __are missing the <220> Feature and associated headings. Use of <220> to <223> is MANDATORY if <213> ORGANISM is "Artificial Sequence" or"Unknown". Please explain source of genetic material in <220> to <223> section (See "Federal Register," 6/01/98, Vol. 63, No. 104,pp.29631-32) (Sec.1.823 of new Rules)

Seg#:18,21,22,23,24,26,27,28,29

VERIFICATION SUMMARY DATE: 09/12/2005 PATENT APPLICATION: US/10/531,870 TIME: 13:21:41

Input Set : A:\764765 1.txt

Output Set: N:\CRF4\09122005\J531870.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:251 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:18, <213> ORGANISM: Artificial L:251 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:18, <213> ORGANISM: Artificial L:251 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:18, Line#:251 L:356 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:21, <213> ORGANISM: Artificial L:356 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:21, <213> ORGANISM: Artificial L:356 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:21,Line#:356 L:367 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:22, <213> ORGANISM: Artificial L:367 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:22, <213> ORGANISM: Artificial L:367 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:22,Line#:367 L:378 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:23, <213> ORGANISM: Artificial L:378 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:23, <213> ORGANISM: Artificial L:378 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:23,Line#:378 L:387 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:24, <213> ORGANISM: Artificial L:387 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:24, <213> ORGANISM: Artificial L:387 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:24,Line#:387 L:427 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:26, <213> ORGANISM: Artificial L:427 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:26, <213> ORGANISM: Artificial L:427 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:26,Line#:427 L:438 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:27, <213> ORGANISM: Artificial L:438 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:27, <213> ORGANISM: Artificial L:438 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:27,Line#:438 L:449 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:28, <213> ORGANISM: Artificial L:449 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:28, <213> ORGANISM: Artificial L:449 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:28,Line#:449 L:458 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:29, <213> ORGANISM: Artificial L:458 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:29, <213> ORGANISM: Artificial L:458 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:29,Line#:458